# IS Enterprise Systems Development Services - Specialist

## **Position Summary**

Under the general direction of the Bureau of Application Support Business Application Section Chief, in the Division of Enterprise Technology (DET), this position performs C# application development for Department of Administration departmental systems across web, windows and mobile platforms. These systems provide critical information and manage automated processes across divisions, local government, state agencies and vendor systems. The systems provide vital information to these customers as well as the State Legislature, the public, and other professional groups. Departmental systems support a broad spectrum of department business activities.

# **Key Responsibilities:**

- Provide C# Application development utilizing .Net framework.
- Performs data and modeling using MSFT SQL Management Studio, LINQ, transaction processing, WCF and XML.
- Creates and maintains client applications using responsive design methodologies.
- Support agencies/divisions through the Application LifeCycle Management process including the definition and design of specifications for the interfaces, data conversions and reports.
- Implement efficient and quality solutions for customers and the IT department.
- Ensure the Application Integration & Development Process is managed properly to achieve the overall business goals.
- Act as a Liaison between Business and Technical Teams.
- Planning and direction for the implementation and operation of statewide and internal systems.
- Product development, implementation and leadership skills to ensure the timely delivery of Internet/Intranet applications.
- Development expertise with business workflow and web/ portal and client architecture.
- Support for enhancements and ongoing maintenance of applications.

This position requires the most advanced working knowledge of .Net development, MSFT SQL databases, knowledge of leadership techniques, service- oriented architecture (SOA), software design patterns, and project management.

The systems that the incumbent is responsible for are critical to the mission of the agency and, as such, have widespread impact throughout state and local government and affect the private sector, as well.

This position may, due to the nature of work performed, have direct access to the desktop computer, e-mail or network files and other information that affects the employer-employee relationship.

#### **Goals and Worker Activities**

TIME%	GOALS AND WORKER ACTIVITIES	
70%	A.	Develop state-of-the-art web, windows and mobile based applications
20%	A1.	Design, develop and maintain web- based applications using .NET, Boot strap, and responsive design technologies.
20%	A2.	Utilize C#, .Net, Visual Studio, VSO/ VSTS, JavaScript and HTML for development, testing and deploying applications.

- A3. Design, develop, interface and administer applications using the latest technologies available to the department including SharePoint, MSFT Dynamics CRM, MSFT Exchange, IIS and MSFT SQL.
- A4. Perform system analysis and design functions and advanced programming tasks, as well as consulting with, assisting, and instructing functional users in the use of Web based applications.
- A5. Perform advanced professional information systems (IS) work on large complex web, client and mobile-based systems under general supervision.
- A6. Develop and propose detailed design solutions. Define application functionality, data requirements, business rules and application flow.
- A7. Perform database design, development and implementation tasks using SQL programming skills, including stored procedures, views, SSIS and user defined functions.
- A8. Follow Agile/scrum Methodology prototyping solutions to define and refine business requirements.
- A9. Leverage Design Patterns to support best practice software development processes. Utilize Test Driven Development (TDD) and Continuous Integration techniques to improve software quality.
- A10. Assist customers in the identification and resolution of IT needs through process improvement. Research alternate solutions to business needs.

### 20% B. Perform business analysis and project management activities for applications

- B1. Manage/lead projects, develop project plans, identify project resources, establish proper project controls and ensure project schedules are maintained.
- B2. Develop product version schedules and work plans. Analyze cost-benefit for design options and alternatives for each business requirement.
- B3. Meet with agency management and staff to define/review/determine feasibility, establish product scope, goals, business requirements, objectives and perform cost benefit analyses.
- B4. Develop project implementation plans, which include project resources estimates vs. actual expenditure and target dates.
- B5. Coordinate all development and modification activities among project team members using techniques like flowcharts and structured walk-throughs, to ensure the quality design of the application and its components.
- B6. Provide oral and written project status reports to Customers and IT management.
- B7. Plan and advice in the development of service level objectives for establishing and providing department-wide Internet/Intranet support, performance and availability to meet the department's needs and usage levels.

## 5% C. Maintain professional credentials and participate in additional functions.

- C1. Review new developments in information systems through ongoing review of trade, technical and vendor publications.
- C2. Attend training sessions and vendor demonstrations concerning hardware, software and techniques with possible application for use within the Department.
- C3. Perform all duties assigned, either by your supervisor or by his/her delegate, in a timely and professional manner.
- C4. Support the department's Affirmative Action Policy.
- C5. Interact with other DET staff and clients in a in a pleasant, courteous and professional manner, at all times to maintain a positive working environment.
- C6. Make suggestions concerning procedures, policies and expanded use of office systems.
- C7. Assist user management by participation on augmentation, steering, and advisory committees.
- C8. Possess strong interpersonal, relationship building, analytical and problem-solving skills.

#### 5% D. Provide leadership in the development of good customer relations

- D1. Develop and manage relationships with key customer representatives in each of the divisions and with partner agencies.
- D2. Develop and maintain coordination and problem resolution with other areas within DET to ensure responsive service to customers.
- D3. Ensure that contractors know and understand DET standards for application development.
- D4. Research and evaluate new developments in information systems through ongoing review of trade, technical and vendor publications.
- D5. Provide consulting and support services to the department and agency partners.
- D6. Demonstrate excellent analysis, collaboration and communication skills.

#### General Knowledge and Skills Required

- 1. Experience as a Senior Software Developer, Team Leader or Application Architect
- 2. Experience with .Net
- 3. Experience delivering solutions using Microsoft Technologies across multiple platforms and programming languages
- 4. Leadership and team-building abilities
- 5. Knowledge of WWW and client server environments and requirements
- 6. Strong oral and written communication skills including the ability to communicate business and technical concepts and information effectively to a wide range of audiences including the public
- 7. Strong inter-personal skills, including the ability to work with peers and customers
- 8. Ability to learn quickly; synthesize complex information; identify key points and communicate results accurately and effectively
- 9. Ability to work independently and exercise appropriate discretion with a minimum of supervision and produce effective, acceptable results within short time frames
- 10. JavaScript (intermediate)
- 11. Microsoft Visual Studio (intermediate)
- 12. C#, Boot Strap, responsive design, JavaScript, Visual Studio, MSFT SQL and Web Services/WCF
- 13. IIS, MSFT Dynamics CRM, MSFT SQL or SharePoint Environment
- 14. Visual Studio Team Services (source control, build and release, ALM) (basic)
- 15. HTML 5.0 Hypertext Markup Language (advanced)
- 16. CSS Cascading Style Sheets (basic)
- 17. Microsoft SQL Server, Reporting Services, Analysis Services, Integration Services
- 18. Test Driven Development Techniques
- 19. Database Design/Modeling and Query Optimization (intermediate)
- 20. XML Extensible Markup Language (intermediate)